

Is Saturated Fat Healthy? The Science Backed Benefits of Saturated Fat

By Liam McAuliffe

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Is Saturated Fat Healthy? The short answer is, yes, very healthy.

Yet for more than half a century saturated fat has been the most demonized nutrient on earth. Everyone knows it clogs your arteries, right? Actually, that's

wrong. But after a lifetime of misinformation, we know this will take some convincing.

In reality, saturated fat is a key nutrient in the healthiest and most nutrient-dense foods on earth like red meat, eggs, and full-fat dairy. And it plays an essential and supportive role in numerous critical bodily functions.

Thankfully, modern science is setting the record straight.

In this article, we'll explore the ways that saturated fat is healthy, and offer a thorough rundown of the science on saturated fat intake and health outcomes.

Fast Facts About Saturated Fats and Health

- SFAs make up 1/2 of cell membrane structures in our body
- Enhances calcium absorption
- Aids in the body's synthesis of the essential fatty acids
- Provides a rich source of fat soluble vitamins A, D, E, and K
- Saturated fat in the diet doesn't directly translate to saturated fats in the blood
- Saturated fat levels in the blood are influenced by the prevalence of carbs in the diet and the subsequent carb-generated lipogenesis process
- 60% of your brain is made of fat. 50% of the fat in your brain is saturated, and critical for cognitive function
- Saturated fats are the building blocks of many key hormones
- Cell membranes are 50% saturated fat
- Saturated fats can increase HDL, the "good cholesterol"
- Consuming a low-carb high-fat diet can increase LDL particle size—which reduces risk of heart disease
- Stearic Acid, One of the most common saturated fatty acids found in meat is associated with improved body fat, improved mitochondrial function, and weight loss ^[1]

- Stearic acid has been shown to slightly lower or have a neutral effect on LDL (bad) cholesterol ^[2]
- Stearic acid shows no evidence of raising your risk of heart disease ^[3]



What is Saturated Fat?

Before jumping into the details of just how saturated fat is healthy, let's briefly define what we're talking about.

Saturated fat is a specific class of fatty acid molecule consisting of carbon and hydrogen atoms. A fat is designated as saturated when it has the following characteristics:

- All or most of the carbon-hydrogen bonds are single bonds
- All available carbon bonds are paired with hydrogen atoms

These stable bonds protect SFA molecules from oxidation and rancidity. The stability of SFAs is why our body uses them to build durable cellular membranes.

Why Saturated Fat is Healthy

54% of the fat in human breast milk is saturated fat. This is a strong indicator that it offers critical health benefits. Let's look at the healthy roles saturated fat plays in the body.

Saturated Fat is an Excellent Source of Energy

Saturated fat is an excellent source of energy and humans have adapted over millennia to thrive on it.

We know this because when we eat excess carbs and calories we convert them to saturated fat stores on our bodies.

When our body metabolizes this stored fat through calorie restriction and exercise, we are essentially consuming saturated fat. The human body easily converts SFAs to ketones even when not in a starvation state (unlike most other animals), providing a superior energy source for the majority of cells in our bodies.

As Carnivore diet thought leader Amber O'Hearn points out, our pre-humans and cavemen ancestors ate a steady diet of huge extremely fatty animals for nearly 2 million years of evolution.

The bodies of modern humans are nearly identical to our caveman ancestors and are therefore adapted to consuming and mobilizing fat stores for energy.

In the context of human dietary evolution, it was our scavenging of fatty bone meats and brains leftover from the kills of other predators that directly fueled our rapid brain development. [4]

Our massive, fat-fueled brains are what separates us from our primate ancestors. Our ability to prioritize fat as a primary fuel source is essentially what makes us human.

Vilifying saturated fat is a highly suspicious view of the human body and human evolution. It would make zero sense for our bodies to have developed a taste, storage system, and metabolism that efficiently uses saturated fat if it gave us heart attacks.

Supports Cardiovascular Health

In fact, consuming saturated fat in the context of low-carb high-fat diets has been shown to support cardiovascular health. [5]

Having lower Lp(a) is generally healthier bc it's a carrier for oxidized phospholipids in our blood plasma. Oxidized lipids can embed themselves in your arterial walls creating atherosclerotic lesions.

Consuming saturated fat reduces the levels of lipoprotein (a) in your bloodstream and increases “good” HDL cholesterol. The overall effect is the improvement of our heart disease risk factors.

Protects the Liver

Saturated fats have been shown to protect the liver from the effects of alcohol and drugs. In the context of a low-carb diet, SFAs have been shown to alleviate fatty liver disease. [6]

Supports Healthy Lungs

A phospholipid fat made up of saturated palmitic acid keeps the surface of the lungs supple and protects them from irritants. [7]

Supports Healthy Cell and Brain Function

Saturated fatty acids make up a large percentage of our cell membranes, and 80

In some areas of the human brain saturated fats make up more than 80 percent of the phospholipids, and over half of the fatty acids in cell membranes are saturated fatty acids. [8]

Myristic acid, a saturated fatty acid in milk products is essential for many cellular signaling pathways. [9]

Supports Infant Development

Human milk fat is about 50% fat, and 54% of that is saturated fat.

This fat fuels the rapidly growing infant brain and spares the protein for building a developing the body. Children who are put on low-fat diets develop growth and other health problems.

Authors of a study published in *Pediatric Pathology & Molecular Medicine* stated, “evidence supports the view that intervening in childhood (2-15 years) with low-fat low-cholesterol diets or even worse, lipid-lowering drugs to prevent atherosclerotic plaques in adulthood is wasted effort.

Overzealous parents may unwittingly induce malnutrition in their children and many children with restricted access to palatable foods, will yearn for them even more as they become older leading to overweightness. ^[10]

Supports Intake of Fat-Soluble Vitamins

Saturated fats in various animal foods carry fat-soluble vitamins A and D into the body in forms that are more easily absorbed and utilized.

In countries where intake of animal foods such as eggs and butter are low, vitamin A deficiencies are a problem. ^[11]

The pioneering dentist and dietary researcher Weston A. Price found the traditional diets of saturated fat and vitamins A, D, and K. who showed remarkable dental health and extremely low prevalence of modern diseases

A Healthy Cooking Oil

Saturated bonds make SFAs molecularly stable and therefore resistant to oxidation and rancidity, even when exposed to high heat [3].

For example, ghee which is around 70% saturated fat has a smoke point of 485°F (250°C), which is substantially higher than even butter's 350°F (175°C) smoke point.

Heating ghee has also been shown to produce far less of the toxic compound acrylamide when compared with vegetable and seed oils high in PUFAs.

One study revealed that soybean oil produced more than 1000% higher acrylamide than ghee when both were heated to just 320°F (160°C). ^[12]

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Where Did the Anti-Saturated Fat Movement Come From

The unfounded singling out and demonization of saturated fat is generally attributed to the influential nutritionist Ansel Keys and his Seven Countries Study in 1967.

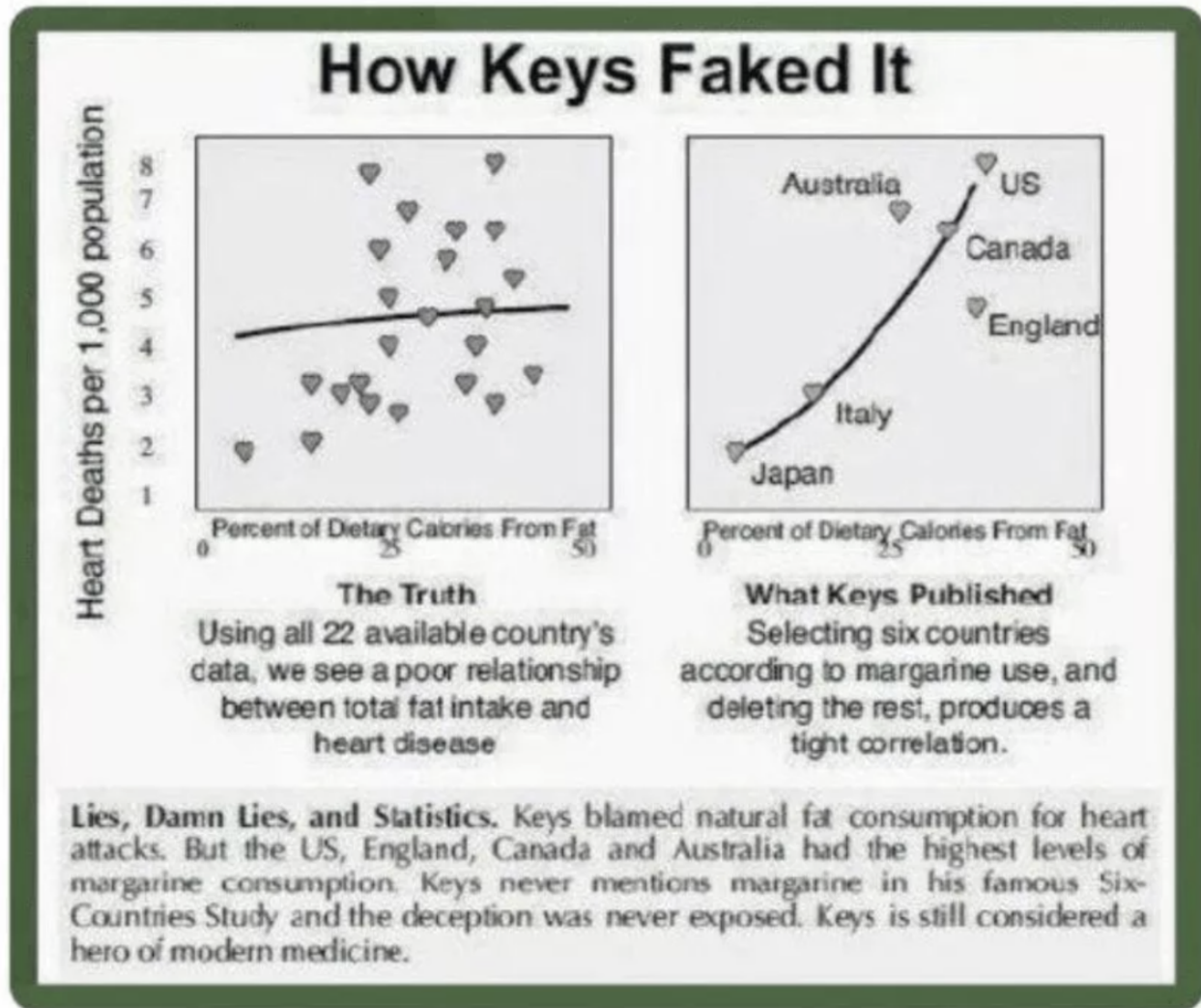
Keys' study was motivated by an alarming increase in incidences of heart disease in American middle-aged men.

Though the study actually examined the diets of 22 countries, Keys and his team cherry-picked the diets of 13,000 men in the U.S., Japan, Italy, Greece, the Netherlands, Yugoslavia, and Finland.

Among these countries, Keys correlated lower rates of heart disease with eating less animal fat, and more vegetables, grains, beans, fruit, and fish.

If the study was conducted accurately it would have been called the Twenty Two Countries Study and included the omitted data that challenged his hypothesis that fat intake was the main cause of heart disease.

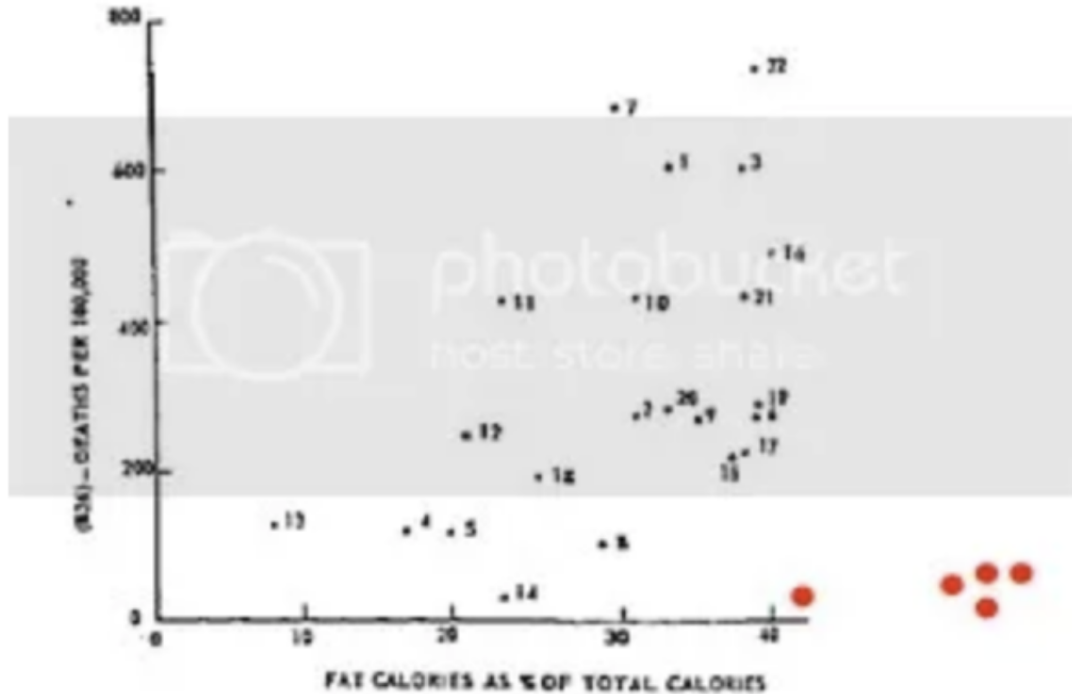
Targeting saturated fat was an easy answer to a more complex problem, and Keys was rewarded with the cover of Time Magazine. The media and health institutions ran with it, and are still trumping the anti-meat anti-fat fallacy to this day.



Source: *Deep Nutrition*, Cate Shanahan

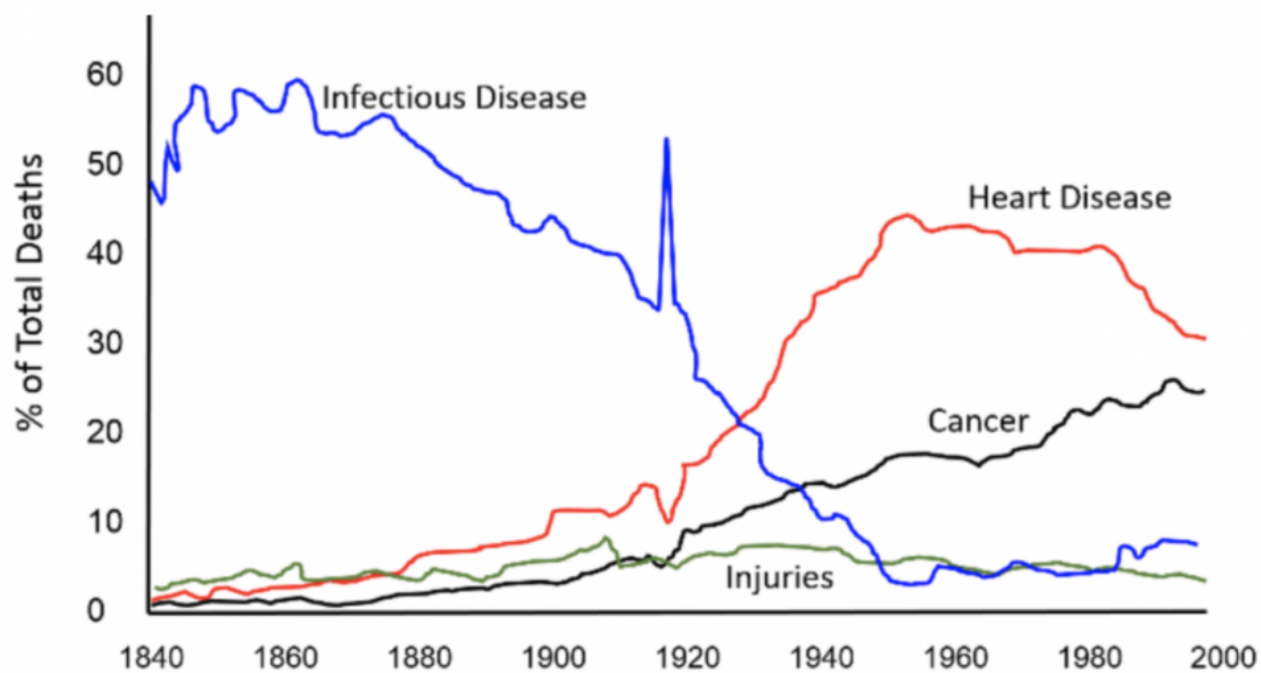
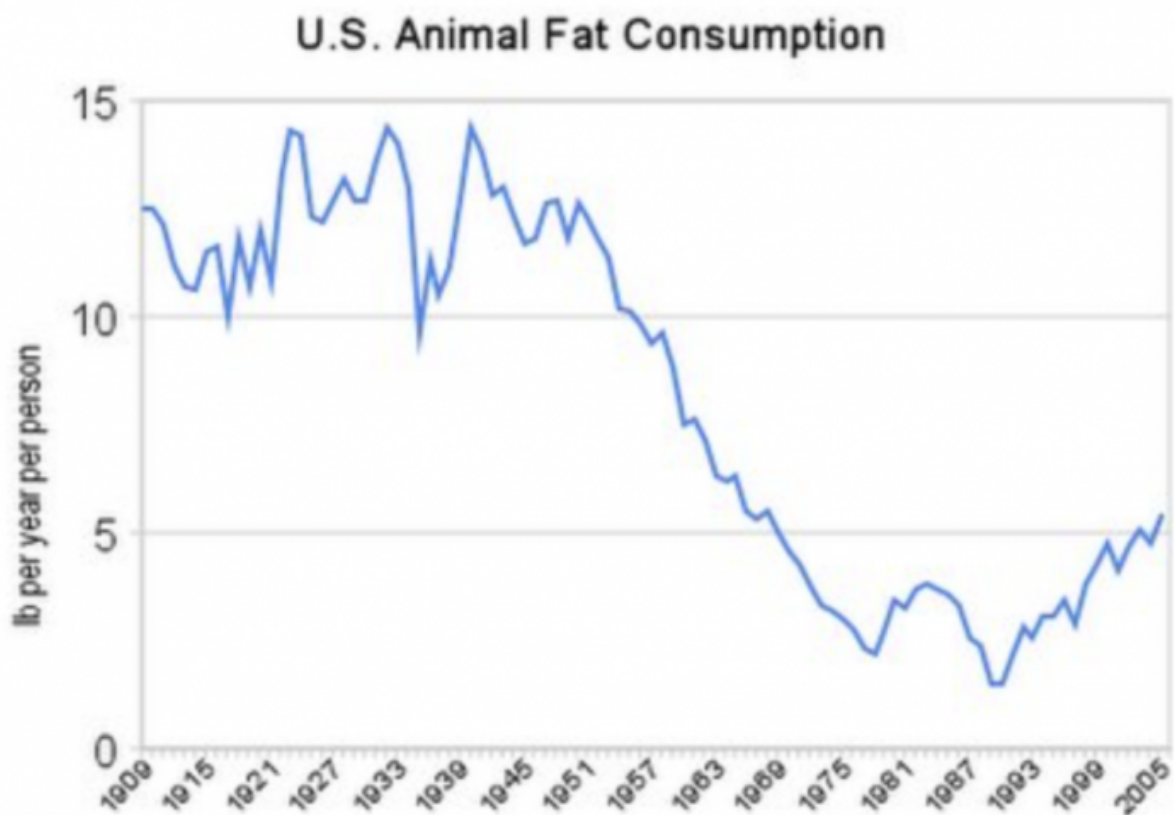
The red dots in the chart below represent populations that were not included in the original study: The Tokelau, Masai, and Inuit eat very high levels of saturated fat and have extremely low rates of heart disease.

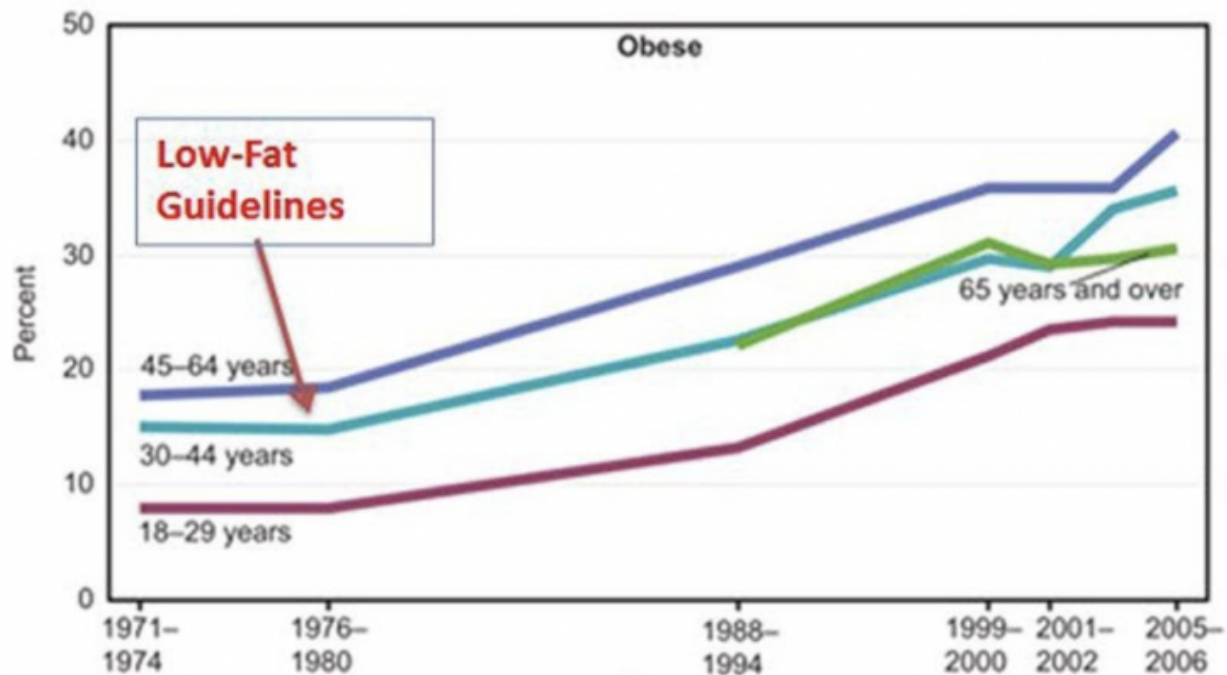
The original evidence....



So what was the real cause of increased heart disease rates in America? It was likely the very thing that was touted as the replacement for animal fat: Margarine and other forms of “vegetable” oil.

Over 100 years we can chart a strong correlation between the reduction in animal fat consumption and recommendations for a low-fat diet, with rising rates of obesity and heart disease.





Ironically, a peer of Keys, the British scientist John Yudkin, was revealing connections between sugar intake and heart disease, but these were largely dismissed by scientific journals and health institutions. ^[13]

The New Science on Saturated Fat

Modern studies looking at evidence from over 1 million participants and published in the most respected medical journals around the world are setting the saturated fat story straight.

Research on Health Effects of Saturated Fat: Fast Facts

- For the average person, saturated fat is not significantly associated with heart disease, cancer, stroke, diabetes, and death from heart attack ^[14] ^[15] ^[16] ^[17] ^[18]
- Intake of saturated fat in unprocessed red meat is not associated with CVD ^[19]

- Whole-fat dairy, unprocessed meat, and dark chocolate are SFA-rich foods with a complex matrix (of nutrients) that are not associated with an increased risk of CVD. “The totality of available evidence does not support further limiting the intake of such foods.” [20]
- Though total saturated fat intake is not related to incidences of heart disease, substituting animal protein for animal fat may increase your risk of heart disease [21]

Studies Looking at Saturated Fat and Health Outcomes

Here’s a rundown of the modern and some buried older studies that tell the real story of dietary fat intake and CVD risk.

Re-evaluation of the traditional diet-heart hypothesis: analysis of recovered data from Minnesota Coronary Experiment (1968–73)

Christopher E Ramsden ¹, Daisy Zamora ², Sharon Majchrzak-Hong ³, Keturah R Faurot ⁴, Steven K Broste ⁵, Robert P Frantz ⁶, John M Davis ⁷, Amit Ringel ³, Chirayath M Suchindran ⁸, Joseph R Hibbeln ³

Affiliations + expand

PMID: 27071971 PMCID: [PMC4836695](#) DOI: [10.1136/bmj.i1246](#)

[Free PMC article](#)

In this randomized control trial looking at the efficacy of replacing saturated fat with polyunsaturated fats researchers lowered cholesterol 14%.

However, this resulted in a “22% higher risk of death for each 30 mg/dL reduction in serum cholesterol.”

Results: The intervention group had significant reduction in serum cholesterol compared with controls (mean change from baseline -13.8% v -1.0% ; $P < 0.001$). Kaplan Meier graphs showed no mortality benefit for the intervention group in the full randomized cohort or for any prespecified subgroup. There was a 22% higher risk of death for each 30 mg/dL (0.78 mmol/L) reduction in serum cholesterol in covariate adjusted Cox regression models (hazard ratio 1.22, 95% confidence interval 1.14 to 1.32; $P < 0.001$). There was no evidence of benefit in the intervention group for coronary atherosclerosis or myocardial infarcts. Systematic review identified five randomized controlled trials for inclusion ($n=10,808$). In meta-analyses, these cholesterol lowering interventions showed no evidence of benefit on mortality from coronary heart disease (1.13, 0.83 to 1.54) or all cause mortality (1.07, 0.90 to 1.27).

Conclusions: Available evidence from randomized controlled trials shows that replacement of saturated fat in the diet with linoleic acid effectively lowers serum cholesterol but does not support the hypothesis that this translates to a lower risk of death from coronary heart disease or all causes. Findings from the Minnesota Coronary Experiment add to growing evidence that incomplete publication has contributed to overestimation of the benefits of replacing saturated fat with vegetable oils rich in linoleic acid.



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The Present and Future

JACC State-of-the-Art Review

Saturated Fats and Health: A Reassessment and Proposal for Food-Based Recommendations: JACC State-of-the-Art Review

Arne Astrup MD, DMSc^a   , Faidon Magkos PhD^a, Dennis M. Bier MD^b, J. Thomas Brenna PhD^{c, d, e}, Marcia C. de Oliveira Otto PhD^f, James O. Hill PhD^g, Janet C. King PhD^h, Andrew Mente PhDⁱ, Jose M. Ordovas PhD^j, Jeff S. Volek PhD, RD^k, Salim Yusuf DPhilⁱ, Ronald M. Krauss MD^{l, m}

Highlights

- The U.S. Dietary Guidelines recommend the restriction of SFA intake to <10% of calories to reduce CVD.
- Different SFAs have different biologic effects, which are further modified by the food matrix and the carbohydrate content of the diet.
- Several foods relatively rich in SFAs, such as whole-fat dairy, dark chocolate, and unprocessed meat, are not associated with increased CVD or diabetes risk.
- There is no robust evidence that current population-wide arbitrary upper limits on saturated fat consumption in the United States will prevent CVD or reduce mortality.

Research

Use of dietary linoleic acid for secondary prevention of coronary heart disease and death: evaluation of recovered data from the Sydney Diet Heart Study and updated meta-analysis

BMJ 2013 ; 346 doi: <https://doi.org/10.1136/bmj.e8707> (Published 05 February 2013)

Cite this as: *BMJ* 2013;346:e8707

This study known as the Sydney Heart Health study, was conducted to support the AustralianHeart Association's hypothesis that replacing SFAs with PUFAs from seed oils would improve CVD risk factors.

Wow, did that backfire: The group that replaced saturated fat with vegetable oils did lower cholesterol, but had a 62% higher death rate!

Setting Ambulatory, coronary care clinic in Sydney, Australia.

Participants 458 men aged 30-59 years with a recent coronary event.

Interventions Replacement of dietary saturated fats (from animal fats, common margarines, and shortenings) with omega 6 linoleic acid (from safflower oil and safflower oil polyunsaturated margarine). Controls received no specific dietary instruction or study foods. All non-dietary aspects were designed to be equivalent in both groups.

Outcome measures All cause mortality (primary outcome), cardiovascular mortality, and mortality from coronary heart disease (secondary outcomes). We used an intention to treat, survival analysis approach to compare mortality outcomes by group.

Results The intervention group (n=221) had higher rates of death than controls (n=237) (all cause 17.6% v 11.8%, hazard ratio 1.62 (95% confidence interval 1.00 to 2.64), P=0.05; cardiovascular disease 17.2% v 11.0%, 1.70 (1.03 to 2.80), P=0.04; coronary heart disease 16.3% v 10.1%, 1.74 (1.04 to 2.92), P=0.04). Inclusion of these recovered data in an updated meta-analysis of linoleic acid intervention trials showed non-significant trends toward increased risks of death from coronary heart disease (hazard ratio 1.33 (0.99 to 1.79); P=0.06) and cardiovascular disease (1.27 (0.98 to 1.65); P=0.07).

Conclusions Advice to substitute polyunsaturated fats for saturated fats is a key component of worldwide dietary guidelines for coronary heart disease risk reduction. However, clinical benefits of the most abundant polyunsaturated fatty acid, omega 6 linoleic acid, have not been established. In this cohort, substituting dietary linoleic acid in place of saturated fats increased the rates of death from all causes, coronary heart disease, and cardiovascular disease. An updated meta-analysis of linoleic acid intervention trials showed no evidence of cardiovascular benefit. These findings could have important implications for worldwide dietary advice to substitute omega 6 linoleic acid, or polyunsaturated fats in general, for saturated fats.

Trial registration Clinical trials [NCT01621087](https://www.clinicaltrials.gov/ct2/show/study?term=NCT01621087).

Analysis

WHO draft guidelines on dietary saturated and trans fatty acids: time for a new approach?

BMJ 2019 ; 366 doi: <https://doi.org/10.1136/bmj.l4137> (Published 03 July 2019)

Cite this as: BMJ 2019;366:l4137

In this BMJ editorial review 19 BMJ researchers called for a retraction on WHO guidelines for reducing saturated fat. ^[22]

The 2018 WHO draft guidance on fatty acids fails to consider the importance of the food matrix, argue **Arne Astrup and colleagues**

Key messages

- The 2018 WHO draft guidelines on dietary saturated fatty acids and trans fatty acids recommend reducing total intake of saturated fat and replacing it with polyunsaturated and monounsaturated fatty acids
- The recommendations fail to take into account considerable evidence that the health effects of saturated fat varies depending on the specific fatty acid and on the specific food source
- Maintaining general advice to reduce total saturated fatty acids will work against the intentions of the guidelines and weaken their effect on chronic disease incidence and mortality
- A food based translation of the recommendations for saturated fat intake would avoid unnecessary reduction or exclusion of foods that are key sources of important nutrients

Fat or fiction: the diet-heart hypothesis

 Robert DuBroff¹, Michel de Lorgeril²

Correspondence to Dr Robert DuBroff, Internal Medicine/Cardiology, University of New Mexico, Albuquerque, NM 87131, USA; rjdabq@gmail.com

<http://dx.doi.org/10.1136/bmjebm-2019-111180>

In this 2019 study researchers concluded “The preponderance of evidence indicates that low-fat diets that reduce serum cholesterol do not reduce cardiovascular events or mortality” [5]

[Food Nutr Res.](#) 2016; 60: 10.3402/fnr.v60.31694.

Published online 2016 Sep 27. doi: [10.3402/fnr.v60.31694](https://doi.org/10.3402/fnr.v60.31694)

PMCID: PMC5040825

PMID: [27680091](https://pubmed.ncbi.nlm.nih.gov/27680091/)

Food consumption and the actual statistics of cardiovascular diseases: an epidemiological comparison of 42 European countries

[Pavel Grasgruber](#),^{*} [Martin Sebera](#), [Eduard Hrazdira](#), [Sylva Hrebickova](#), and [Jan Cacek](#)

This study of 42 European countries revealed a very strong NEGATIVE correlation between animal products and heart disease.

And not surprisingly, it revealed a positive correlation between carbs and increased risk of heart disease. [23]

Results

We found exceptionally strong relationships between some of the examined factors, the highest being a correlation between raised cholesterol in men and the combined consumption of animal fat and animal protein ($r=0.92$, $p<0.001$). The most significant dietary correlate of low CVD risk was high total fat and animal protein consumption. Additional statistical analyses further highlighted citrus fruits, high-fat dairy (cheese) and tree nuts. Among other non-dietary factors, health expenditure showed by far the highest correlation coefficients. The major correlate of high CVD risk was the proportion of energy from carbohydrates and alcohol, or from potato and cereal carbohydrates. Similar patterns were observed between food consumption and CVD statistics from the period 1980–2000, which shows that these relationships are stable over time. However, we found striking discrepancies in men's CVD statistics from 1980 and 1990, which can probably explain the origin of the 'saturated fat hypothesis' that influenced public health policies in the following decades.

Conclusion

Our results do not support the association between CVDs and saturated fat, which is still contained in official dietary guidelines. Instead, they agree with data accumulated from recent studies that link CVD risk with the high glycaemic index/load of carbohydrate-based diets. In the absence of any scientific evidence connecting saturated fat with CVDs, these findings show that current dietary recommendations regarding CVDs should be seriously reconsidered.

Comparative Study > [Lancet](#). 2017 Nov 4;390(10107):2050-2062.

doi: 10.1016/S0140-6736(17)32252-3. Epub 2017 Aug 29.

Associations of fats and carbohydrate intake with cardiovascular disease and mortality in 18 countries from five continents (PURE): a prospective cohort study

The PURE study looked at data from 140k subjects in 18 Countries. Researchers found [24]

- Animal protein is associated with lower risk of mortality
- Saturated fat is associated with lower risk of CVD
- The highest fat consumption was associated with 20% lower risk of death

- The highest carb intake was associated with a 28% increase in risk of death

Findings: During follow-up, we documented 5796 deaths and 4784 major cardiovascular disease events. Higher carbohydrate intake was associated with an increased risk of total mortality (highest [quintile 5] vs lowest quintile [quintile 1] category, HR 1.28 [95% CI 1.12-1.46], $p_{\text{trend}}=0.0001$) but not with the risk of cardiovascular disease or cardiovascular disease mortality. Intake of total fat and each type of fat was associated with lower risk of total mortality (quintile 5 vs quintile 1, total fat: HR 0.77 [95% CI 0.67-0.87], $p_{\text{trend}}<0.0001$; saturated fat, HR 0.86 [0.76-0.99], $p_{\text{trend}}=0.0088$; monounsaturated fat: HR 0.81 [0.71-0.92], $p_{\text{trend}}<0.0001$; and polyunsaturated fat: HR 0.80 [0.71-0.89], $p_{\text{trend}}<0.0001$). Higher saturated fat intake was associated with lower risk of stroke (quintile 5 vs quintile 1, HR 0.79 [95% CI 0.64-0.98], $p_{\text{trend}}=0.0498$). Total fat and saturated and unsaturated fats were not significantly associated with risk of myocardial infarction or cardiovascular disease mortality.

Interpretation: High carbohydrate intake was associated with higher risk of total mortality, whereas total fat and individual types of fat were related to lower total mortality. Total fat and types of fat were not associated with cardiovascular disease, myocardial infarction, or cardiovascular disease mortality, whereas saturated fat had an inverse association with stroke. Global dietary guidelines should be reconsidered in light of these findings.

Meta-analysis

Original research article

Evidence from randomised controlled trials does not support current dietary fat guidelines: a systematic review and meta-analysis

Zoë Harcombe¹, Julien S Baker¹, James J DiNicolantonio², Fergal Grace¹ and Bruce Davies³

Correspondence to Zoë Harcombe; Zoe.Harcombe@quws.ac.uk

This meta-analysis of randomized control trials by lead researcher Zoe Harcombe looked at data from 62,000 patients. It showed that interventions lowering dietary fat showed no significant difference in all-cause mortality or death from heart disease ^[25].

[10]

Abstract

Objectives National dietary guidelines were introduced in 1977 and 1983, by the USA and UK governments, respectively, with the ambition of reducing coronary heart disease (CHD) mortality by reducing dietary fat intake. A recent systematic review and meta-analysis by the present authors, examining the randomised controlled trial (RCT) evidence available to the dietary committees during those time periods, found no support for the recommendations to restrict dietary fat. The present investigation extends our work by re-examining the totality of RCT evidence relating to the current dietary fat guidelines.

Methods A systematic review and meta-analysis of RCTs currently available, which examined the relationship between dietary fat, serum cholesterol and the development of CHD, was undertaken.

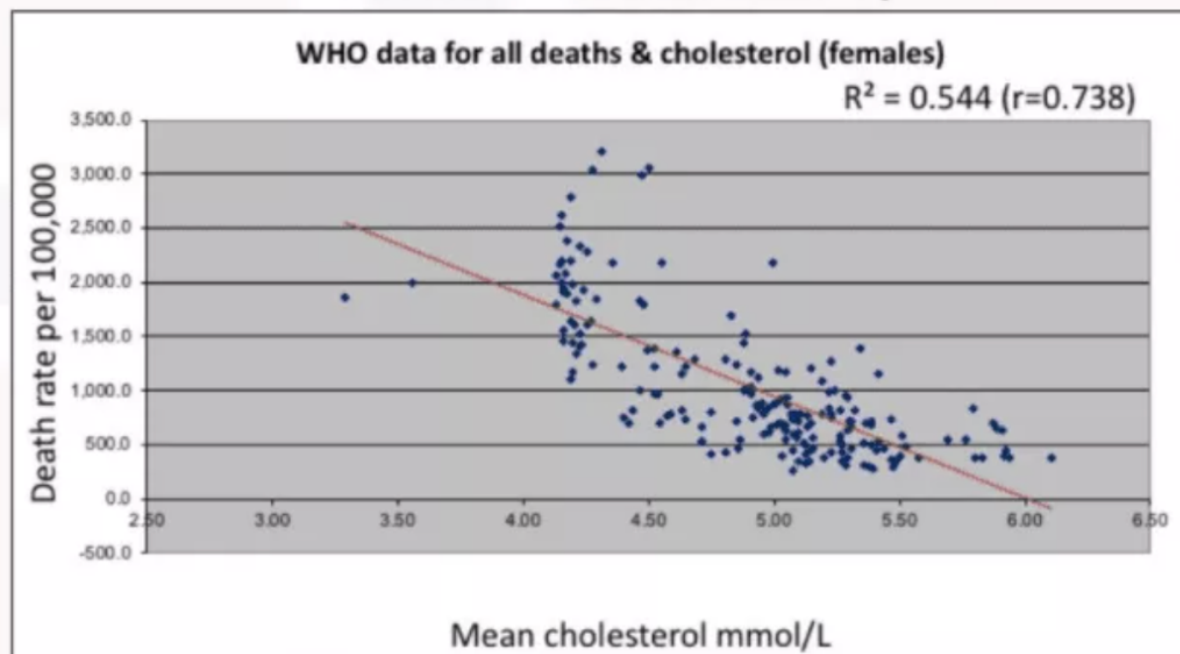
Results The systematic review included 62 421 participants in 10 dietary trials: 7 secondary prevention studies, 1 primary prevention and 2 combined. The death rates for all-cause mortality were 6.45% and 6.06% in the intervention and control groups, respectively. The risk ratio (RR) from meta-analysis was 0.991 (95% CI 0.935 to 1.051). The death rates for CHD mortality were 2.16% and 1.80% in the intervention and control groups, respectively. The RR was 0.976 (95% CI 0.878 to 1.084). Mean serum cholesterol levels decreased in all intervention groups and all but one control group. The reductions in mean serum cholesterol levels were significantly greater in the intervention groups; this did not result in significant differences in CHD or all-cause mortality.

Conclusions The current available evidence found no significant difference in all-cause mortality or CHD mortality, resulting from the dietary fat interventions. RCT evidence currently available does not support the current dietary fat guidelines. The evidence presently lacks generalisability for population-wide guidelines.

Harcombe also examined World Health Organization Data from 192 countries and found a negative correlation between cholesterol level and risk of death in females.

All deaths & cholesterol

The 192 Countries Study



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This meta-analysis of observational studies of 347,000 subjects found ^[26]

“No significant evidence for concluding that dietary saturated fat is associated with an increased risk of CHD or CVD”

Results: During 5–23 y of follow-up of 347,747 subjects, 11,006 developed CHD or stroke. Intake of saturated fat was not associated with an increased risk of CHD, stroke, or CVD. The pooled relative risk estimates that compared extreme quantiles of saturated fat intake were 1.07 (95% CI: 0.96, 1.19; P = 0.22) for CHD, 0.81 (95% CI: 0.62, 1.05; P = 0.11) for stroke, and 1.00 (95% CI: 0.89, 1.11; P = 0.95) for CVD. Consideration of age, sex, and study quality did not change the results.

Conclusions: A meta-analysis of prospective epidemiologic studies showed that there is no significant evidence for concluding that dietary saturated fat is associated with an increased risk of CHD or CVD. More data are needed to elucidate whether CVD risks are likely to be influenced by the specific nutrients used to replace saturated fat.

The effect of replacing saturated fat with mostly n-6 polyunsaturated fat on coronary heart disease: a meta-analysis of randomised controlled trials

Steven Hamley 

Nutrition Journal 16, Article number: 30 (2017) | [Cite this article](#)

The RCT exploring the government recommendation for replacing saturated fat with PUFAs found that “Available evidence from adequately controlled randomized controlled trials suggest replacing SFA with mostly n-6 PUFA is unlikely to reduce CHD events, CHD mortality or total mortality.” ^[27]

Dietary fatty acids in the secondary prevention of coronary heart disease: a systematic review, meta-analysis and meta-regression

Review published: 2014.

Bibliographic details: Schwingshackl L, Hoffmann G. Dietary fatty acids in the secondary prevention of coronary heart disease: a systematic review, meta-analysis and meta-regression. *BMJ Open* 2014; 4(4): e004487. [[PMC free article](#)] [[PubMed](#)]

This meta-analysis of RCTs Replacing saturated fat concluded, [28]

CONCLUSIONS: The present systematic review provides no evidence (moderate quality evidence) for the beneficial effects of reduced/modified fat diets in the secondary prevention of coronary heart disease. Recommending higher intakes of polyunsaturated fatty acids in replacement of saturated fatty acids was not associated with risk reduction.

Dietary fatty acids in the secondary prevention of coronary heart disease: a systematic review, meta-analysis and meta-regression


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This study of thousands of Chicago men by Stamler concluded:

CONCLUSIONS: The present systematic review provides no evidence (moderate quality evidence) for the beneficial effects of reduced/modified fat diets in the secondary prevention of coronary heart disease. Recommending higher intakes of polyunsaturated fatty acids in replacement of saturated fatty acids was not associated with risk reduction.

Low-Fat Dietary Pattern and Cancer Mortality in the Women's Health Initiative (WHI) Randomized Controlled Trial

Rowan T Chlebowski , Garnet L Anderson, JoAnn E Manson, Ross L Prentice, Aaron K Aragaki, Linda Snetselaar, Shirley A A Beresford, Lewis H Kuller, [Karen Johnson](#), Dorothy Lane ... [Show more](#)

JNCI Cancer Spectrum, Volume 2, Issue 4, October 2018, pky065,

<https://doi.org/10.1093/jncics/pky065>

Published: 07 January 2019 **Article history** ▼

The Women's Health Initiative is the largest RCT of low-fat diet ever conducted. It showed that a low-fat diet provided no benefits with regard to weight loss and cardiovascular disease. [29]

Clinical Trial > JAMA. 1982 Sep 24;248(12):1465-77.

Multiple risk factor intervention trial. Risk factor changes and mortality results. Multiple Risk Factor Intervention Trial Research Group

In this classic study that took place over 9 years and collected data from 361,000 participants, the group that lowered saturated fat died at higher rates.

At the 16-year follow-up, participants in this group had 20% higher rates of lung cancer even when they quit smoking ^[30].

> JAMA. 1987 Apr 24;257(16):2176-80. doi: 10.1001/jama.257.16.2176.

Cholesterol and mortality. 30 years of follow-up from the Framingham study

K M Anderson, W P Castelli, D Levy

PMID: 3560398 DOI: 10.1001/jama.257.16.2176

In this 30-year follow-up to the bellwether Framingham study, it was shown that lowering cholesterol led to an increase of “11% overall and 14% CVD death rate increase per 1 mg/dL per year drop in cholesterol levels”. Men with cholesterol below 190 were 3x more likely to get colon cancer.^[8]

In this 30-year follow-up to the bellwether Framingham study, it was shown that lowering cholesterol led to an increase of “11% overall and 14% CVD death rate increase per 1 mg/dL per year drop in cholesterol levels”. Men with cholesterol below 190 were 3x more likely to get colon cancer. ^[31]

Comparative Study > [Cardiology](#). 1993;82(2-3):100-21. doi: 10.1159/000175862.

Factors predictive of long-term coronary heart disease mortality among 10,059 male Israeli civil servants and municipal employees. A 23-year mortality follow-up in the Israeli Ischemic Heart Disease Study

[U Goldbourt](#) ¹, [S Yaari](#), [J H Medalie](#)

In this study of 10,000 Israeli civil servants over 23 years, researchers found no significant association between reducing dietary saturated fat intake and risk of heart disease. [32]

Clinical Trial > [Ann Intern Med](#). 2004 May 18;140(10):769-77.

doi: 10.7326/0003-4819-140-10-200405180-00006.

A low-carbohydrate, ketogenic diet versus a low-fat diet to treat obesity and hyperlipidemia: a randomized, controlled trial

[William S Yancy Jr](#) ¹, [Maren K Olsen](#), [John R Guyton](#), [Ronna P Bakst](#), [Eric C Westman](#)

Affiliations + expand

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This 24 week randomized control trial compared a high-fat keto group with a low-fat group [33].

It showed that the keto group lost 2X the weight and improved their triglyceride to HDL ratio, which is a strong risk factor for heart disease 9.

In this study, 84 people with obesity and type 2 diabetes were randomly selected to either a low carb or low glycemic diet. The study revealed that:

- 95% of people in the on the low-carb diet discontinued meds

- Blood pressure improved
- Lost and average of 24 lbs
- Improved triglyceride/HDL ratio

To answer the question, ‘is saturated fat healthy?’ we outlined the numerous important roles that saturated fat plays in the body.

We also examined numerous modern studies showing no causation nor correlation—and in many cases an inverse relationship—between saturated fat intake and cardiovascular disease risk.

From these numerous data points it is clear that, yes, saturated fat is indeed healthy, especially when consumed as part of whole low-carb high-fat foods like meat, eggs, and dairy.

<https://www.doctorkiltz.com/is-saturated-fat-healthy/>